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EREP QUARTERLY PROGRESS REPORT

31 OCTOBER 1974 to 31 JANUARY 1975

PLANNING APPLICATIONS IN EAST CENTRAL FLORIDA

EXPERIMENT PROPOSAL NO. 385

CONTRACT NO. CC-30281A

BREVARD COUNTY PLANNING DEPARTMENT

2575 North Courtenay Parkway

Merritt Island, Florida 32952

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ERLP PROGRESS REPORT

Covering the period 31 October to 31 January 1975

PLANNING APPLICATIONS IN EAST CENTRAL FLORIDA

Proposal No. 385

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31 January 1975

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ALACHUA COUNTY

At the request of the North Central Florida Regional Planning Council, a land use map of Alachua County has been made from S190A photography. The nine-inch enlargements were used in a Variscan viewer and the pattern traced, as described in an earlier progress report.¹ A difference, however, is that the next higher enlargement stage (X12.06) was used, giving a map with a scale of approximately 1/55,000.

Enlarging the photography by that amount meant that only about one fourth of the county could be projected on the Variscan screen at one time; hence, the county was divided into four segments for mapping. The mapping of each segment on the Variscan took about six hours of the interpreter's time, for a total of approximately 24 man-hours for that part of the job. USGS 7.5' quadrangle map plus a road map of the county were the only ground truth sources available for this stage of the process.

The Anderson classification system was used to identify land uses. (partially level one and partially level two), and the rough map was sent to the regional planners for their evaluation and correction. They checked the map against their aircraft photography (1/63,000 scale) and local knowledge, and the qualitative evaluation was favorable: "In all regards, it seems as though the map is very accurate and will be of use in the future for regional planning purposes."

The map contains 540 land use "blocs". Twenty seven corrections were made, corresponding to one correction for every 20 "blocks".

¹ EREF Quarterly Progress Report, 3 July 1974.

After the corrections were pointed out to the interpreter, they were nearly all seen on a recheck of the photography, indicating that more experience, or more careful interpretation, or interpretation by a person familiar with the region probably could increase the original accuracy somewhat.

The following corrections were made:

Sub-areas within larger areas.

Four industrial sectors were added (Three of these were overlooked; two were in cropland sectors and one was within a forest sector. The fourth was in an urban region and was not seen clearly as industrial even upon recheck.)

One rural residential sector was added from within a forest sector.

Two residential sectors were added from within forest sectors.

One wooded residential sector was added from within a cropland sector.

One forest sector was added from within an urban residential sector.

One commercial sector was added from within a cropland sector.

Two citrus grove sectors were added from within a cropland and pasture sector.

One cropland and pasture sector was added from within an urban sector.

One urban sector was added from within a cropland and pasture sector.

Three cropland and pasture sectors were added from within forest sectors.

One marsh sector was added from within a cropland and pasture sector.

One cropland and pasture sector was added from within a bare sand sector.

The following changes in designation were made:

commercial to industrial: 1 case

forest to marsh: 1 case

cropland and pasture to mixture of pasture and forest: 1 case

cropland and pasture to wooded residential: 1 case

cropland and pasture to forest: 4 cases

agricultural to mixture of cropland and pasture and wooded residential: 1 case

commercial to institutional: 1 case

Relative to the last item, commercial to institutional; certainly institutional land use cannot be ascertained from photography without local knowledge. It is our philosophy that local knowledge and other sources of information should be used to assist the interpretation where practicable.

Upon receipt of the above corrections, a final version of the map was prepared and sent to the regional planners for their evaluation and use. Figures 1-4 show this map presented in four sectors to minimize confusion of detail.

We regard a map of this type, with land uses designated by a numerical system, as a base map to be used by planners for reference and to prepare versions which they find useful. Since planners usually prefer to designate land uses by colors, we have made a couple of hand-colored versions of this map; this significantly enhances their appeal and utility and does not decrease their capability when the numbers are also included.

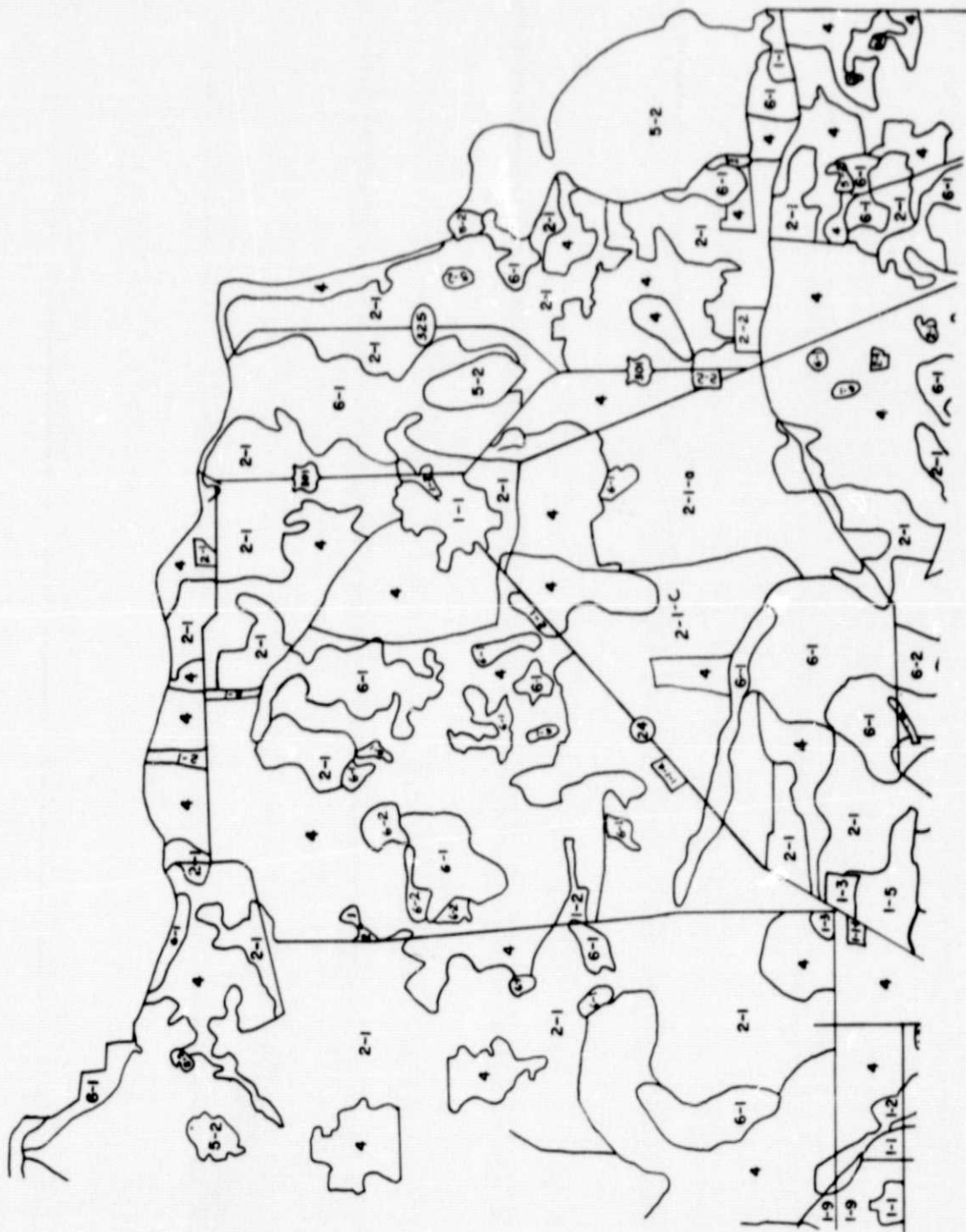


Figure 2. Land Use Map, Northeast Sector,
Alachua County

Time spent by the regional planners in checking and correcting the rough map was six man-hours, making a total of approximately 30 man-hours to go from the photography to the corrected rough map. The time required for the remaining stages would be the same as that for preparation of a land use map by a conventional process.

Checking of the final map by the regional planners has disclosed one remaining minor error. They have confirmed their satisfaction with the result, have made a hand-colored version and expect the map to be useful in regional and, for some purposes, county planning.

APPENDIX

LAND-USE CATEGORIES:

Level 1

01. Urban and built-up land

02. Agricultural land

03. Rangeland

04. Forest land

05. Water

06. Nonforested Wetland

07. Barren Land

Mixed Categories

Open and Citrus Groves

Groves and Lakes

Lakes, Groves & Vegetated Wetlands

Level 2

01. Residential

a. Wooded residential

b. Rural residential

c. Mobile-home parks

02. Commercial and services

03. Industrial

04. Extraction

a. Phosphate mines

b. Reclaimed phosphate mines-

05. Transportation

07. Strip

09. Open

10. Institutional & recreational

01. Cropland and pasture

a. Muck farms (vegetables)

b. Vegetable farming

c. Pasture

02. Groves

a. Primarily citrus

01. Grass

01. Deciduous

02. Evergreen (pines)

03. Mixed

01. Streams and waterways

02. Lakes

03. Other (Gulf of Mexico)

01. Vegetated

02. Bare

03. Sand other than beaches